

**Notice of Allowability**

Application No.

10/802,731

Applicant(s)

SAYAMA, MASAHIKO

Examiner

Carlos Amaya

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/18/2004.
2. ☒ The allowed claim(s) is/are 1-9.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 03/1804/, 02/23/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

**DETAILED ACTION**

*REASONS FOR ALLOWANCE*

1. Claims 1-9 are allowed.
2. The following is the examiner's statement of reasons for allowance. With respect to claim 1 Morinaga (US 2003/0051540) discloses a power circuit of a vehicular electronic control unit including a microprocessor for driving various electric loads in accordance with operation states of various input sensors and contents of a program memory (The ECU 21 input signals from sensors 17, 18, 19, 20 and 26, Page 2 Column 2 paragraph [0028]), the power circuit comprising an awakening timer circuit (soak timer 25 for turning on coil 22b intermittently after the engine is deactivated, thus the ECU 21 starts a processing of the leak check).

However, Morinaga does not disclose expressly a constant voltage power circuit that is supplied with power from the vehicle battery via the first or second power supply circuit. Also, Morinaga does not disclose that a second power supply circuit comprises a second opening/closing element that is provided between the vehicle battery and the constant voltage power circuit and is closed in response to the awakening trigger signal.

3. With respect to claim 2 Morinaga discloses a vehicular electronic control unit including a microprocessor for driving various electric loads in accordance with operation states of various input sensors and contents of a program memory (The ECU 21 input signals from sensors 17, 18, 19, 20 and 26, Page 2 Column 2 paragraph [0028]), the power circuit comprising an awakening timer circuit (soak timer 25 for

turning on coil 22b intermittently after the engine is deactivated, thus the ECU 21 starts a processing of the leak check).

However, Morinaga does not disclose expressly a constant voltage power circuit that is supplied with power from the vehicle battery via the first or second power supply circuit. Morinaga does not disclose expressly a first power supply circuit that comprises a power relay having an output contact as a first opening/closing element provided between the vehicle battery and the constant voltage power circuit or between the vehicle battery and the various electric loads, and a coil for closing the output contact and a reverse-blocking diode connected in series to the output contact, wherein the coil being energized when a power switch is turned on and kept energized by a power maintenance drive signal generated by the microprocessor even if the power switch is turned off; and a second power supply circuit comprises a second opening/closing element that connects the vehicle battery and the constant voltage power circuit, and is closed in response to the awakening trigger signal and kept closed by a power maintenance drive signal generated by the microprocessor, wherein the reverse-blocking diode is in such a connection relationship as to allow power supply from the first power supply circuit to the various electric loads and to prohibit power supply from the second power supply circuit to the various electric loads.

4. With respect to claim 4 Morinaga discloses a vehicular electronic control unit including a microprocessor for driving various electric loads in accordance with operation states of various input sensors and contents of a program memory (The ECU 21 input signals from sensors 17, 18, 19, 20 and 26, Page 2 Column 2 paragraph

Art Unit: 2836

[0028]), the power circuit comprising an awakening timer circuit (soak timer 25 for turning on coil 22b intermittently after the engine is deactivated, thus the ECU 21 starts a processing of the leak check).

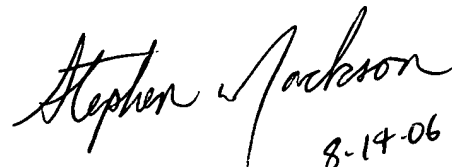
However, Morinaga does not disclose expressly a constant voltage power circuit that is supplied with power from the vehicle battery via the first or second power supply circuit. Morinaga does not disclose a first power supply circuit that comprises a power relay having an output contact as a first opening/closing element provided between the vehicle battery and the constant voltage power circuit or between and the vehicle battery and the various electric loads, and a coil for closing the output contact, and a reverse-blocking diode connected in series to the output contact, wherein the coil being energized when a power switch that is manipulated to start driving of a vehicle is turned on and kept energized by a power maintenance drive signal generated by the microprocessor even if the power switch is turned off; and second power supply circuit comprises a second power relay having an output contact as a second opening/closing element provided between the vehicle battery and the constant voltage power circuit, and a coil for closing the output contact, wherein the coil being energized in response to the awakening trigger signal and kept energized by a power maintenance drive signal generated by the microprocessor, wherein the reverse-blocking diode is in such a connection relationship as to allow power supply from the first power supply circuit to the various electric loads and to prohibit power supply from the second power supply circuit to loads.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner's supervisor, Brian Sircus who can be reached on (571)272-2800. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CA

  
8-14-06  
STEPHEN W. JACKSON  
PRIMARY EXAMINER